ABSTRACT OF THE DISCLOSURE

A method and apparatus for encoding a video signal with a variable bit rate are provided. The method for encoding the video signal with the variable bit rate includes: (a) calculating a complexity for each of a plurality of pictures on the basis of a bit amount and a quantization parameter of a previous frame; (b) calculating a remaining bit amount for each picture in proportion to the complexity for each picture calculated in (a); (c) calculating a quantization parameter of a current frame on the basis of the complexity for each picture and the remaining bit amount for each picture calculated in (b); and (d) comparing the quantization parameter of the current frame calculated in (c) with a predetermined minimum quantization parameter and determining a final quantization parameter.